Portable convection ovens come in a variety of sizes and shapes. They cook food in much the same way as conventional ovens, except for one major difference. In addition to a heating element, convection ovens use a fan which forces the heated air around inside the cavity of the oven to surround the food being cooked.

**Advantages of Convection Oven Cooking**
- Cooking speed is generally quicker than a conventional oven but slower than a microwave.
- Foods retain moisture and nutrients.
- Low-fat cooking is possible for some foods.
- Foods can be evenly browned.
- Many foods can be cooked directly on racks.
- It is easy to see the food while it's cooking.
- Whole meals can be cooked with no flavor-transfer between foods.
- Convection oven simulates several food functions — fry, bake, boil, grill, steam, broil.

**Disadvantages of Convection Oven Cooking**
- Often requires pre-heating.
- Lid and/or total unit may be heavy to lift.
- Potential of burning yourself on hot oven sides and racks when adding or taking out foods.
- Close supervision is necessary if used by or near children.
- Oven needs to be cleaned after each use.
- May be bulky to store.

**Questions You Should Ask Before Purchasing a Convection Oven**

1. Will I use the oven enough to justify the cost?
2. Do I have convenient space for use and storage?
3. Do I have adequate electrical outlets?

**Features**

- **Cavity Size.** The oven should be large enough to satisfactorily hold the largest item you are likely to bake or roast. Some manufacturers offer expansion rings for cooking large items, such as a turkey. When cooking a whole meal, allow space between foods and around the sides to evenly distribute air.

- **Materials.** Some models are made of durable, easy-care plastics. Others combine plastics with glass. The oven should be easy to clean. Racks are generally made of heat- and alkali-resistant materials or coated with nonstick finishes.

- **Racks.** These should adjust and be convenient to use. A top rack may be used to hold down small or lightweight foods when cooking. Items that cook the quickest should be placed on top racks for easy removal. Racks that have narrow spaces help keep small foods from falling through. Most manufacturers recommend that you pre-season the racks before first use. Afterward, using nonstick spray on racks helps make clean-up easier.

- **Control Panels.** Make sure controls are easy to read and to use. Some models have a safety shut-off.

- **Thermostat and Timer.** These features would be on the control panel. The thermostat should have a range of temperature settings and the timer should have settings from a few minutes up to an hour. When
cooking time is finished, a buzzer
should sound and the oven should
shut off automatically.

■ **Heating Element and Fan.** All
forced convection ovens have a
heating element and fan. The noise
level should be low enough not to
be irritating. The fan blade should
be well protected. If blades become
warped, the noise level increases.

■ **Legs, Feet, Knobs, and Han-
dles.** They should be of non-heat-
conducting materials and finishes
should have no rough edges or
sharp corners. Legs, if long enough
to permit air flow beneath the oven,
offer some protection to the
countertop on which the oven is
used. Knobs and handles should
be positioned for easy grasp when
the oven is hot.

■ **Lights.** Indicator lights on the
control panel and a light in the
oven add to convenience.

■ **Operating Instructions.** It is
important to have clear, complete
yet concise instructions on how to
cook food in the forced convection
oven.

■ **Safety.** The exterior surface may
be too hot to touch during high-
temperature use. The unit should
shut off automatically when you
open the lid or door. You can use
instant-reading thermometers to
test foods for doneness.

■ **Cleanability.** Some models can
be washed by adding water and
then running the oven at a low
speed. Other models are dish-
washer safe except for the fan.
However, some parts may be too
large for some dishwashers. Do not
put the fan assembly in water or the
dishwasher.

■ **Energy Consumption.** Wattage
rating for a portable convection
oven is lower than that for a
conventional range oven. Heat loss
is high, however, because the
portable ovens are not insulated
and generally are not constructed
with an air space between the
cavity wall and outer wall. With a
fan blowing hot air around food, a
shorter cooking time and lower
temperature may be needed. The
lower energy use advantage may
not hold when large amounts of
food are cooked or when two time-
use periods are needed. Generally,
it may take several years for the
energy savings in energy cost to equal the
initial cost. For maximum energy
savings and efficiency in time and
clean-up, cook more than one item
at a time.

■ **Warranty.** Warranties are either
full or limited. Replacement parts
and/labor may be included in a
limited warranty. Be sure you
understand procedures and costs
for any repairs. Check to see if
there is an 800 toll free number
listed for additional information or
answers to questions.

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**For More Information**

*Check your library or local bookstores for additional information on convection ovens.*

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